

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P892958

Luminaire Tested: 2MB-SC3-ASML-UNV-CC83-HI-4000K

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892958
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-33)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2MB-SC3-ASML-UNV-CC83-HI-4000K
Description: Selectable 2FT MICROBAY LINEAR BAY with ASYMMETRIC LENS, 80CRI, 4000K CCT, HI lumen setting
Light Source: -
Ballast/Driver: -

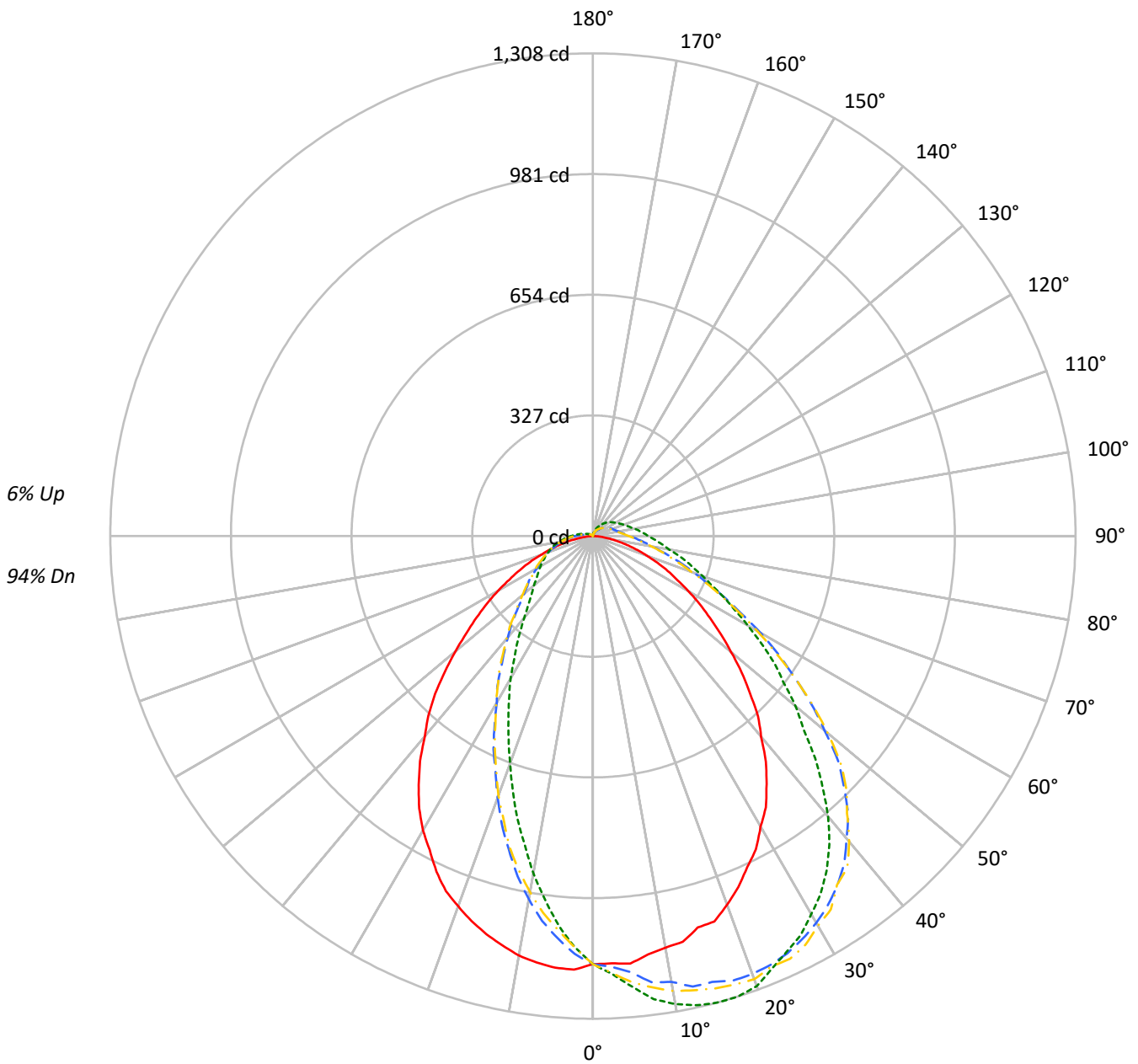
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2891.0 lumens
Efficiency: N/A
Efficacy: 137.7 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.07 / 1.25
Luminous Opening: Rectangular w/ Sides (W: 0.27' x L: 1.98' x H: 0.12')
CIE Type: Direct

Input Watts (W): 21
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.39961257980444
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P892958
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Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° ··· 90°-270° - · 135°-315°



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	97	97	97	97	97	97	94
1	107	103	98	94	104	100	96	92	95	91	88	90	87	85	85	83	81	81	81	81	79
2	98	90	83	78	95	88	82	76	83	78	74	79	75	71	75	72	69	69	69	69	66
3	90	80	72	65	87	78	70	64	74	68	63	70	65	61	67	63	59	59	59	59	57
4	83	71	63	56	80	69	61	55	66	59	54	63	57	53	60	55	51	51	51	51	49
5	76	64	55	49	74	62	54	48	60	53	47	57	51	46	55	49	45	45	45	45	43
6	71	58	49	43	68	56	48	42	54	47	42	52	46	41	50	44	40	40	40	40	38
7	66	53	44	38	64	51	43	38	49	42	37	48	41	36	46	40	36	36	36	36	34
8	61	48	40	34	59	47	39	34	45	38	33	44	37	33	42	37	32	32	32	32	30
9	57	44	36	31	56	43	36	31	42	35	30	40	34	30	39	33	29	29	29	29	28
10	54	41	33	28	52	40	33	28	39	32	28	38	31	27	36	31	27	27	27	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	23751	23751	23751	23751
5°	23774	24204	23999	20921
10°	23282	24719	23734	17828
15°	22889	24631	23277	14908
20°	22645	24144	22741	12195
25°	21714	23024	22015	10035
30°	20734	22004	21001	8290
35°	19639	20767	19694	6755
40°	18000	18996	17990	5538
45°	16386	16767	16468	4720
50°	14493	14636	14425	4264
55°	12686	12821	12597	3916
60°	11034	10934	10934	3703
65°	9563	9415	9337	3516
70°	8004	8251	7729	3363
75°	6370	7500	6197	3238
80°	4714	6750	4289	3015
85°	2947	6519	2388	2825

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 157.5°
 Vertical Angle: 45°
 Luminance: 22938 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.0	3.8
10°-20°	302.9	10.5
20°-30°	435.7	15.1
30°-40°	494.5	17.1
40°-50°	472.5	16.3
50°-60°	384.0	13.3
60°-70°	267.9	9.3
70°-80°	166.0	5.7
80°-90°	95.2	3.3
90°-100°	56.9	2.0
100°-110°	37.4	1.3
110°-120°	26.2	0.9
120°-130°	19.0	0.7
130°-140°	12.6	0.4
140°-150°	7.1	0.2
150°-160°	3.2	0.1
160°-170°	0.9	0.0
170°-180°	0.1	0.0
0°-30°	847.6	29.3
0°-40°	1342.1	46.4
0°-60°	2198.6	76.0
0°-90°	2727.7	94.4
90°-120°	120.5	4.2
90°-150°	159.2	5.5
90°-180°	163.0	5.6
0°-180°	2891.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1160	1160	1160	1160	1160	
5°	1163	1226	1174	1060	1163	110
15°	1098	1308	1117	792	1098	312
25°	989	1243	1003	542	989	456
35°	820	1104	823	359	820	511
45°	602	852	605	240	602	464
55°	387	600	385	183	387	349
65°	224	390	219	146	224	222
75°	100	261	97	113	100	107
85°	22	177	18	77	22	24
90°	1	150	0	59	1	2
95°	1	130	0	45	1	1
105°	1	100	0	24	1	1
115°	1	80	0	13	1	1
125°	1	65	0	9	1	1
135°	1	52	0	7	1	1
145°	1	36	0	5	1	1
155°	1	23	0	3	1	0
165°	1	11	0	1	1	0
175°	1	0	0	0	1	0
180°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1159.9	1159.9	1159.9	1159.9	1159.9	1159.9	1159.9	1159.9	1159.9	1159.9	1159.9
2.5°	1158.8	1167.5	1168.3	1195.6	1187.6	1197.9	1185.0	1187.3	1175.9	1172.8	1133.3
5°	1163.0	1181.6	1186.5	1233.6	1226.0	1231.3	1213.5	1200.6	1174.0	1158.0	1094.2
7.5°	1143.2	1192.2	1219.5	1253.0	1265.5	1269.7	1233.6	1209.7	1165.6	1126.5	1051.7
10°	1132.2	1199.8	1226.4	1276.5	1287.5	1279.6	1251.5	1212.0	1154.2	1091.2	999.3
12.5°	1126.1	1204.0	1250.3	1301.6	1302.0	1293.6	1260.6	1218.0	1135.6	1053.2	943.8
15°	1098.0	1203.2	1250.7	1302.7	1308.4	1303.1	1269.3	1213.9	1116.6	1006.1	880.0
17.5°	1095.0	1201.3	1262.8	1317.5	1308.0	1304.2	1274.6	1212.0	1093.8	958.2	820.0
20°	1063.1	1197.1	1262.8	1300.8	1297.8	1299.3	1278.0	1209.3	1067.6	906.6	754.3
22.5°	1029.3	1192.2	1257.5	1286.4	1268.2	1295.9	1262.8	1202.1	1041.0	852.7	689.0
25°	989.4	1184.2	1247.3	1265.9	1242.7	1264.4	1264.0	1191.1	1003.1	794.5	637.3
27.5°	957.1	1171.7	1230.6	1258.7	1219.2	1237.8	1248.4	1177.8	958.2	737.2	576.5
30°	908.9	1155.7	1210.4	1214.6	1183.5	1207.0	1219.2	1161.1	920.6	672.3	521.1
32.5°	872.0	1137.5	1185.7	1180.0	1148.9	1180.0	1199.8	1144.3	875.8	615.3	482.0
35°	820.4	1115.5	1155.0	1125.0	1104.5	1130.3	1153.5	1126.5	822.7	554.5	431.8
37.5°	770.2	1096.1	1118.1	1080.9	1052.8	1081.7	1132.6	1093.1	769.1	506.3	394.6
40°	709.1	1051.7	1069.9	1019.4	991.3	1033.8	1080.5	1064.2	708.7	456.1	358.5
42.5°	662.8	1018.6	1023.9	954.8	921.4	966.6	1019.8	1023.2	659.7	410.9	326.6
45°	601.6	972.3	962.4	886.5	851.5	892.2	971.9	981.0	604.6	371.8	295.5
47.5°	546.5	920.6	901.3	812.4	773.3	821.5	910.0	933.9	543.1	335.7	266.2
50°	489.2	862.9	820.0	743.3	717.1	741.0	831.4	870.9	486.9	300.0	243.8
52.5°	436.8	799.1	745.9	677.2	651.0	670.7	749.0	808.2	431.1	270.0	224.1
55°	387.4	735.3	666.6	605.8	600.5	606.5	665.4	733.4	384.7	243.5	211.6
57.5°	343.3	657.8	595.2	550.3	540.8	545.8	586.4	656.3	339.9	216.9	193.3
60°	298.9	578.4	524.5	489.9	484.6	488.4	514.6	581.1	296.2	194.5	176.2
62.5°	258.6	498.7	450.8	437.9	434.1	434.1	445.1	505.9	255.2	171.7	163.3
65°	224.1	430.3	394.2	389.3	390.4	390.1	383.2	422.3	218.8	151.5	151.9
67.5°	189.1	357.8	337.6	343.7	348.3	346.4	331.9	351.3	184.6	133.3	141.7
70°	156.9	295.5	291.7	305.4	316.0	306.1	285.2	287.1	151.5	115.5	128.4
72.5°	126.5	238.9	256.4	275.4	285.6	274.6	245.7	237.4	121.9	99.1	116.2
75°	99.5	192.2	219.9	248.0	261.3	247.3	213.8	185.3	96.8	83.6	106.3
77.5°	76.0	152.3	188.0	220.7	233.6	221.4	186.1	144.7	71.0	70.3	95.7
80°	54.3	120.4	166.7	198.3	210.0	198.3	161.4	114.3	49.4	56.2	84.3
82.5°	35.7	93.1	145.1	180.4	193.3	178.9	140.1	88.1	31.5	45.6	76.0
85°	21.6	73.7	126.5	162.2	177.0	162.9	122.7	66.8	17.5	34.9	66.1
87.5°	9.5	57.0	112.8	149.6	162.9	150.0	109.4	52.4	7.2	27.3	56.6
90°	0.8	45.2	99.5	137.9	149.6	137.5	96.8	42.5	0.0	19.7	48.6
92.5°	0.8	38.7	91.2	127.6	140.9	127.2	87.4	34.9	0.0	14.4	41.0
95°	1.1	32.7	82.8	119.6	130.3	118.5	79.8	30.0	0.0	9.9	34.6
97.5°	1.1	29.6	76.0	111.7	123.4	110.9	72.9	27.0	0.0	7.2	28.1
100°	0.8	27.3	70.6	104.1	115.1	103.3	67.6	24.3	0.0	4.6	22.8
102.5°	0.8	25.4	66.1	97.6	106.3	96.5	63.0	22.8	0.0	3.8	18.6
105°	0.8	24.3	61.9	90.0	100.3	90.0	59.2	21.3	0.0	3.0	14.4
107.5°	0.8	22.8	58.9	85.8	94.2	85.1	56.2	20.1	0.0	3.0	11.8
110°	0.8	21.6	56.2	79.8	89.3	80.5	53.6	18.2	0.0	1.9	9.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	0.8	19.7	53.6	75.6	84.7	76.0	51.3	16.7	0.0	1.9	8.4
115°	0.8	17.9	51.3	72.9	79.8	72.2	49.0	14.8	0.0	1.5	7.6
117.5°	0.8	16.7	49.8	69.5	76.3	68.7	47.1	14.1	0.0	1.5	7.2
120°	0.8	16.0	47.5	66.1	71.4	65.3	44.8	13.3	0.0	1.5	6.8
122.5°	0.8	15.2	45.6	63.0	68.7	62.7	42.9	12.9	0.0	1.1	6.1
125°	0.8	14.4	42.9	59.6	64.9	58.9	39.5	12.5	0.0	0.8	5.3
127.5°	0.8	13.7	40.3	57.0	61.9	56.2	37.2	12.2	0.0	0.8	4.9
130°	0.8	13.3	36.8	53.6	58.5	52.8	34.6	12.2	0.0	0.8	4.6
132.5°	0.8	12.9	33.0	50.1	55.5	49.4	31.9	11.8	0.0	0.8	3.8
135°	0.8	12.5	29.2	46.7	51.7	46.0	29.6	11.4	0.0	0.8	3.4
137.5°	0.8	11.8	25.8	42.9	47.9	42.2	28.1	10.6	0.0	0.8	3.0
140°	0.8	11.0	23.2	39.9	44.1	38.7	25.8	9.9	0.0	0.4	2.3
142.5°	0.8	9.9	20.9	36.1	40.3	35.3	23.2	8.4	0.0	0.4	2.3
145°	0.8	8.7	19.0	31.5	36.5	31.5	21.6	7.6	0.0	0.4	1.9
147.5°	0.8	8.0	17.1	26.6	33.0	28.9	19.4	6.5	0.0	0.4	1.5
150°	0.8	7.2	14.8	22.4	29.2	25.4	17.9	5.7	0.0	0.0	1.1
152.5°	0.8	6.5	12.9	18.6	26.2	23.2	16.0	4.9	0.0	0.0	0.8
155°	1.1	6.1	11.0	16.3	22.8	20.1	13.3	4.2	0.0	0.0	0.8
157.5°	1.1	5.3	9.1	13.3	20.1	17.5	10.6	3.4	0.0	0.0	0.4
160°	1.1	4.9	7.6	10.3	16.7	14.4	8.7	2.7	0.0	0.0	0.4
162.5°	1.1	4.6	6.5	7.6	13.7	11.4	6.8	1.9	0.0	0.0	0.4
165°	1.1	3.8	5.7	5.3	10.6	8.7	5.3	1.1	0.0	0.0	0.0
167.5°	1.1	3.4	4.6	3.8	8.0	6.5	3.8	0.8	0.0	0.0	0.0
170°	1.1	2.7	3.8	2.7	2.3	4.2	2.3	0.4	0.0	0.0	0.0
172.5°	1.1	2.3	3.0	1.9	0.8	2.3	1.1	0.0	0.0	0.0	0.0
175°	1.1	1.9	1.9	1.1	0.4	0.8	0.0	0.0	0.0	0.0	0.0
177.5°	1.1	1.5	1.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4



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CATALOG NUMBER: 2MB-SC3-ASML-UNV-CC83-HI-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1159.9	1159.9	1159.9	1159.9	1159.9	1159.9
2.5°	1128.0	1115.5	1104.1	1116.2	1125.0	1158.8
5°	1072.9	1059.7	1061.2	1072.2	1101.4	1163.0
7.5°	1016.0	993.9	999.3	1030.0	1073.3	1143.2
10°	948.7	928.6	933.6	979.9	1040.7	1132.2
12.5°	888.7	854.9	883.8	927.5	1002.7	1126.1
15°	818.5	791.9	807.5	872.0	966.2	1098.0
17.5°	742.5	722.0	740.6	804.8	921.4	1095.0
20°	684.0	655.5	677.6	748.2	866.0	1063.1
22.5°	618.3	596.7	619.8	684.8	809.4	1029.3
25°	564.4	541.6	564.8	629.3	759.2	989.4
27.5°	512.0	491.1	512.0	571.2	709.5	957.1
30°	466.0	445.9	467.2	524.1	651.4	908.9
32.5°	423.1	397.3	424.6	479.7	600.1	872.0
35°	378.7	359.3	379.8	441.0	543.1	820.4
37.5°	341.8	321.7	346.0	398.4	494.9	770.2
40°	306.9	289.0	308.4	364.2	453.9	709.1
42.5°	279.5	261.7	281.4	333.1	412.5	662.8
45°	252.9	239.7	255.6	298.9	370.7	601.6
47.5°	233.6	222.2	235.5	273.8	335.7	546.5
50°	216.9	208.9	218.4	248.8	299.7	489.2
52.5°	202.1	194.1	205.1	229.4	271.2	436.8
55°	190.7	183.4	191.8	211.2	242.7	387.4
57.5°	178.1	173.6	180.0	191.8	220.3	343.3
60°	169.0	164.1	170.9	180.4	194.8	298.9
62.5°	158.8	156.1	160.3	167.9	175.5	258.6
65°	149.6	145.8	151.2	153.8	153.1	224.1
67.5°	139.8	138.6	141.7	142.0	136.3	189.1
70°	129.5	128.8	132.6	130.3	118.5	156.9
72.5°	121.2	121.2	123.4	118.9	103.3	126.5
75°	112.0	112.8	114.7	109.4	87.0	99.5
77.5°	103.7	104.4	104.8	97.6	72.9	76.0
80°	94.2	93.8	97.6	88.5	59.2	54.3
82.5°	85.8	84.3	86.6	77.5	47.9	35.7
85°	76.3	76.7	78.2	67.6	38.4	21.6
87.5°	68.7	68.7	70.3	59.6	28.9	9.5
90°	59.6	58.9	61.1	50.5	21.6	0.8
92.5°	52.0	52.0	53.6	43.3	16.0	0.8
95°	44.4	44.8	46.0	35.7	12.2	1.1
97.5°	38.0	38.4	39.9	30.4	8.7	1.1
100°	32.3	32.7	33.4	24.3	6.8	0.8
102.5°	27.0	28.1	28.1	20.1	5.3	0.8
105°	22.8	24.3	23.5	16.3	4.9	0.8
107.5°	19.0	20.5	20.5	13.3	4.9	0.8
110°	15.6	17.9	17.5	11.4	3.8	0.8



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CATALOG NUMBER: 2MB-SC3-ASML-UNV-CC83-HI-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	13.3	15.2	14.1	9.9	3.8	0.8
115°	11.4	13.3	12.5	9.1	3.4	0.8
117.5°	10.3	11.4	11.4	8.7	3.4	0.8
120°	9.5	10.6	10.3	8.4	3.4	0.8
122.5°	8.7	9.5	9.5	7.6	3.0	0.8
125°	8.4	8.7	9.1	6.8	3.0	0.8
127.5°	8.0	8.7	8.7	6.5	2.7	0.8
130°	7.2	8.0	8.0	6.1	2.7	0.8
132.5°	6.5	7.2	7.2	5.7	2.7	0.8
135°	6.1	6.8	6.8	5.3	2.7	0.8
137.5°	5.7	6.1	6.1	4.9	2.7	0.8
140°	4.9	5.7	5.7	4.6	2.7	0.8
142.5°	4.6	5.3	5.3	4.2	2.3	0.8
145°	4.2	4.6	4.9	3.8	2.3	0.8
147.5°	3.4	4.2	4.6	3.4	2.3	0.8
150°	2.7	3.8	3.8	3.4	2.3	0.8
152.5°	1.9	3.4	3.4	3.0	1.9	0.8
155°	1.5	2.7	3.0	2.7	1.9	1.1
157.5°	1.1	2.3	2.7	2.7	1.9	1.1
160°	0.8	1.9	2.3	2.3	1.5	1.1
162.5°	0.4	1.5	1.9	2.3	1.5	1.1
165°	0.0	1.1	1.5	1.9	1.5	1.1
167.5°	0.0	0.8	1.1	1.5	1.1	1.1
170°	0.0	0.4	0.8	1.1	1.1	1.1
172.5°	0.0	0.0	0.4	0.8	0.8	1.1
175°	0.0	0.0	0.0	0.4	0.8	1.1
177.5°	0.0	0.0	0.0	0.4	0.8	1.1
180°	0.4	0.4	0.4	0.4	0.4	0.4



TEST NUMBER: P892958
 CATALOG NUMBER: 2MB-SC3-ASML-UNV-CC83-HI-4000K

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	19.89	21.35	20.35	21.78	22.24	22.05	23.51	22.51	23.95	24.40
	3H	20.71	22.03	21.18	22.48	22.97	23.72	25.04	24.19	25.49	25.98
	4H	20.92	22.16	21.41	22.62	23.13	24.54	25.78	25.02	26.24	26.75
	6H	21.01	22.16	21.51	22.64	23.16	25.37	26.52	25.87	27.00	27.52
	8H	21.01	22.11	21.53	22.61	23.14	25.81	26.91	26.32	27.40	27.94
	12H	21.00	22.05	21.52	22.55	23.11	26.29	27.35	26.81	27.84	28.40
4H	2H	20.32	21.56	20.81	22.02	22.53	22.43	23.67	22.91	24.13	24.64
	3H	21.41	22.46	21.91	22.96	23.50	24.28	25.32	24.78	25.83	26.36
	4H	21.75	22.70	22.27	23.22	23.79	25.22	26.17	25.75	26.69	27.26
	6H	21.94	22.78	22.49	23.32	23.90	26.22	27.05	26.77	27.60	28.18
	8H	21.97	22.75	22.52	23.30	23.89	26.75	27.53	27.30	28.07	28.67
	12H	21.98	22.68	22.55	23.26	23.85	27.35	28.05	27.92	28.63	29.23
8H	4H	22.07	22.85	22.62	23.39	23.99	25.37	26.15	25.92	26.69	27.29
	6H	22.39	23.04	22.97	23.63	24.23	26.50	27.15	27.08	27.74	28.34
	8H	22.48	23.07	23.08	23.67	24.28	27.14	27.73	27.74	28.33	28.95
	12H	22.54	23.06	23.13	23.65	24.33	27.90	28.43	28.50	29.01	29.70
12H	4H	22.14	22.85	22.71	23.42	24.02	25.36	26.06	25.93	26.64	27.24
	6H	22.52	23.11	23.12	23.71	24.33	26.51	27.10	27.11	27.70	28.32
	8H	22.68	23.20	23.27	23.79	24.47	27.22	27.74	27.81	28.33	29.01